

AMENDMENTS TO THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1-19 (Cancelled)

20. (Currently Amended) Wire pit for an approach system of a web formation machine comprising:

a chute located in an upper portion of the wire pit for receiving white water, wherein said chute forms a lower surface of the upper portion of the wire pit,

an overflow portion adjacent said chute for stabilizing a surface level of the white water in the wire pit,

a gas separator for separating gas from the white waters, and

a lower portion downstream of the upper portion and said lower portion having an outlet connectable to a mixing pump, wherein at least one wall of the wire pit converges downwardly to provide flow direction of the liquid through the wire pit which deviates from a vertical angle.

21. (Original) A wire pit according to claim 20 wherein the upper portion of the wire pit has walls sloped downwards and outwards.

22. (Currently Amended) A wire pit ~~according to claim 20~~ for an approach system of a web formation machine comprising:

a chute located in an upper portion of the wire pit for receiving white water,

an overflow portion adjacent said chute for stabilizing a surface level of the white water in the wire pit,

a gas separator for separating gas from the white waters, and

a lower portion downstream of the upper portion and said lower portion having an outlet connectable to a mixing pump, wherein at least one wall of the wire pit converges downwardly to provide flow direction of the liquid through the wire pit which deviates from vertical, and

wherein the wire pit has ~~having~~ a flow path cross-section converging in a flow direction, and the lower portion is adjustable to a plurality of angular positions in relation to said upper portion.

23. (Original) A wire pit according to claim 22, wherein the wire pit further comprises a middle portion located between said upper portion and lower portion, and the middle portion is adjustable to a plurality of angular positions in relation to at least one of said upper portion and said lower portion.

24. (Original) A wire pit according to claim 22, wherein the lower portion is connectable to the mixing pump.

25. (Cancelled)

26. (Original) A wire pit according to claim 20, wherein said chute is divided into to at least two flow paths for white water streams having different fiber contents.

27. (Original) A wire pit according to claim 20, wherein said chute includes a plurality of flow paths for white water streams having various fiber contents.

28. (Original) A wire pit according to claim 20, wherein the overflow portion includes an upper edge of a wall of the wire pit.

29. (Original) A wire pit according to claims 26, wherein said chute is connected in a downstream direction to a deflector which directs a flow of white waters having a higher fiber content to a zone of the wire pit distant from the overflow portion.

30. (Currently Amended) A wire pit according to claim ~~25~~ 20, wherein a wall of the wire pit is located adjacent the chute, and said wall is sloped downwards and outwards at an angle in a range of 5 degrees to 30 degrees from ~~vertical~~ horizontal.

31. (Currently Amended) A wire pit according to claim ~~25~~ 20, wherein a wall of the wire pit extends from chute in a flow direction, and said wall descends at an angle in a range of 20 degrees to 45 degrees from horizontal.

32. (Currently Amended) A wire pit ~~according to claim 31~~, for an approach system of a web formation machine comprising:

a chute located in an upper portion of the wire pit for receiving white water,

an overflow portion adjacent said chute for stabilizing a surface level of the white water in the wire pit,

a gas separator for separating gas from the white water, and

a lower portion downstream of the upper portion and said lower portion having an outlet connectable to a mixing pump, wherein at least one wall of the wire pit converges downwardly to provide flow direction of the liquid through the wire pit which deviates from vertical

wherein said chute forms a bottom of the upper portion of the wire pit

wherein a wall of the wire pit extends from chute in a flow direction, and said wall descends at an angle in a range of 20 degrees to 45 degrees from horizontal, and

wherein downstream of said wall the wire pit further comprises a middle portion between said upper portion and lower portion, and a wall of said middle portion descends at an angle of 35 degrees to 55 degrees from horizontal.

33. (Currently Amended) A wire pit ~~according to claim 26, for an approach~~
system of a web formation machine comprising:

a chute located in an upper portion of the wire pit for receiving white water,

an overflow portion adjacent said chute for stabilizing a surface level of the white water in the wire pit,

a gas separator for separating gas from the white water, and

a lower portion downstream of the upper portion and said lower portion having an outlet connectable to a mixing pump, wherein at least one wall of the wire pit converges downwardly to provide flow direction of the liquid through the wire pit which deviates from vertical,

wherein said chute is divided into to at least two flow paths for white water streams having different fiber contents, and

wherein at least 50% of the overflow portion is in a zone containing a pulp fraction flow with a lower fiber content.

34. (Original) A wire pit according to claim 26, wherein the overflow portion or a flow channel downstream of the overflow portion includes a fiber fraction separator for separating fiber from overflow liquid.

35. (Original) A wire pit according to claim 34, wherein said fiber fraction separator is a curved screen or pressure screen.

36. (Original) A wire pit according to claim 20, wherein said gas separator is at the upper portion of the wire pit.

37. (Currently Amended) A wire pit ~~according to claim 36,~~ for an approach system of a web formation machine comprising:

a chute located in an upper portion of the wire pit for receiving white water,
an overflow portion adjacent said chute for stabilizing a surface level of the white water in the wire pit,

a gas separator for separating gas from the white waters and said gas separator is at the upper portion of the wire pit, and

a lower portion downstream of the upper portion and said lower portion having an outlet connectable to a mixing pump, wherein at least one wall of the wire pit converges downwardly to provide flow direction of the liquid through the wire pit which deviates from vertical,

wherein the overflow portion has an overflow edge, and a height of the overflow edge, measured from a center line of the outlet opening of the lower portion of the wire pit, is in a range of two to five times a diameter of the outlet opening.

38. (Original) A wire pit according to claim 20, further comprising walls having an inside surface including at least one deflector positioned in a flow path through the pit.

REMARKS

This Amendment is being resubmitted in response to the USPTO Notice of Non-Compliant Amendment issued September 29, 2003. The Notice stated that the status of all claims had not been stated in the prior Amendment submitted on August 19, 2003. The August Amendment did not indicate that claims 1-19 had been cancelled. That infirmity has been corrected in this Amendment which states that claims 1-19 are cancelled.

Reconsideration of this application is respectfully requested. The indication of allowability of dependent claims 22 to 24, 32, 33, 35 and 37 is appreciated. These claims have been rewritten into independent form to place them in clear condition for allowance.

It would be appreciated if the Examiner would inquire with the PCT regarding the matter of a certified copy of the foreign priority document. This matter is typically handled by the PCT authority.

The objection to claim 30 has been overcome by making the amendment suggested in the Action.

Independent claim 20 has been amended to incorporate the element of cancelled claim 25 regarding the chute forming a lower surface of the upper portion of the wire pit.

The rejection of claims 20, 21, 27, 28 and 36 as being anticipated by Witham (Pat. 1,629,607) is traversed. Witham was not applied to claim 20. The rejection should be withdrawn because claim 20 has been amended to incorporate the limitation of claim 25. Witham does not disclose several elements recited in the rejected claims including:

- A chute located in an upper portion of the wire pit for receiving white water, as is recited in claim 20. According to Fig. 1 of Witham, the wire pit 8 has no chute located in an upper portion of the wire pit for receiving white water shown in Witham.
- A chute forming a lower surface of the upper portion of the wire pit, as recited in amended claim 20.
- An overflow portion adjacent said chute for stabilizing a surface level of the white water in the wire pit, as is recited in claim 20. Because there is no chute in the upper portion of the wire pit, there can be no overflow portion adjacent to the absent chute. In the Witham wire pit, stock is permitted to flow over the edges of the wire to the wire pit 8, as illustrated by arrows 16 in Fig. 1. Part of the white water flows via the save-all 41 located above the wire pit. The white water flowing through the save-all is discharged in the vicinity of the outlet of the wire pit, and flows in the vertical direction from the save-all towards the piping 9. Witham has installed plates and other means for deflecting the stock flowing over the edges of the wire to the wire pit.
- A lower portion downstream of the upper portion and said lower portion having an outlet connectable to a mixing pump, wherein at least one wall of the wire pit converges downwardly to provide flow direction of the liquid through the wire pit which deviates from vertical, as is recited in claim 20.

- The upper portion of the wire pit having walls sloped downwards and outwards, as is recited in claim 21. The Witham wire pit has walls that do not slope outwards.
- A chute having a plurality of flow paths for white water streams having various fiber contents, as is recited in claim 27. Witham does not disclose a chute.

The rejection of claims 20, 25 (cancelled) to 31, 34, 36 and 38 as being anticipated by Elderkin (Pat. 2,706,434) is traversed. Elderkin does not disclose several elements of the rejected claims including:

- The chute forms a lower surface of the upper portion of the wire pit, as recited in independent claim 20 as amended. In Elderkin, the chute gates (78a-f) do not form a bottom of the upper portion of the wire pit. The chute gates are above and separate from the walls (38, 40, 50 and 52) of the wire pit. Accordingly, the chutes disclosed in Elderkin teach away from the chutes that form a lower surface of the wire pit recited in claim 20.
- A chute divided into two flow paths for white water having different fiber contents, as recited in claims 26, 29 and 34. The chute gates shown in Elderkin are not arranged to and are not disclosed as handling flows of different fiber contents.

A wall of the wire pit sloped downwards and outwards at an angle in a range of 5 degrees to 30 degrees from horizontal, as recited in claims 30 and 31. The

wire pit wall shown in Elderkin does not slope “outward” and does not have an angled of between 5 to 45 degrees.

The rejection of claims 20, 21, 28 and 36 as being anticipated by Beachler (Pat. 2,748,670) is traversed. Beachler was not applied to reject claim 25. The rejection should be withdrawn because independent claim 20 has been amended to incorporate the limitation of claim 25. further, Beachler does not disclose several elements of the rejected claims including:

- A chute located in an upper portion of the wire pit, wherein the chute forms a lower surface of the upper portion, as is recited in independent claim 20.
- Beachler discloses a wire pit 16 in which stock from the wire falls to a tray-like save-alls 14 and flows through the downspouts 15 and the laterally extending conduit portions 17 to the wire pit 16. The Action does not identify what feature of Beachler is akin to the chute recited in claim 20. The channel 24 is not a chute as recited in claim 20, because the channel is a lower portion of the wire pit and is not part of the upper portion of the wire pit as required by claim 20. In Beachler, the wire pit receives the white water from the conduit 17 in the side channels 22 and 23, which are separated from the central longitudinally extending channel 24 by means longitudinally extending walls 25 and 26. Apertures 25a and 26a in the walls 25 and 26 for fluid

communication between the central channel 24 and the side channels. The white water flows from the central channel 24 into the lower basin 29.

- At least one wall of the wire pit that converges downwardly. The channel 24 in Beachler does not converge.
- An upper portion of the wire pit having walls sloped downwards and “outwards”, as recited in claim 21. The walls of the upper portion (side channels 22, 23) in Beachler do not slope outward.

The rejection of claims 20, 21, 25 (cancelled), 31, 36 and 38 for obviousness over Arakawa (JP 54-082769) is traversed. The Action does not state that Arakawa discloses a wire pit, and the English translation of the Arakawa abstract does not represent that a wire pit is disclosed. Accordingly, it is not understood how Arakawa is being applied to the present invention for a wire pit. Rather, Arakawa discloses a draining tank having a lower chute to drain white water. Arakawa does not disclose or suggest several elements of the rejected claims including:

- A chute located in an upper portion a wire pit, or a chute that forms a lower surface of the upper portion, as recited in claim 20. Arakawa does not appear to disclose a wire pit. The draining tank is the upper portion of the Arakawa device.
- An overflow portion adjacent the chute, as recited in claim 20.

A gas separator, as recited in claim 20. Similarly, Arakawa does not disclose a gas separator in an upper portion of a wire pit as recited in claim 36.

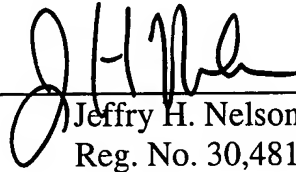
- A lower portion that converges, as recited in claim 20. It appears that the chutes 2, 3 in Arakawa diverge as they open to passage 8.

All claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone the undersigned. Prompt reconsideration and allowance of this application is requested.

Respectfully submitted,

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